

2024

Student Handbook for

Olympiads, NTSE, KVPY and Engineering
& Medical Careers

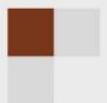


TABLE OF CONTENTS

S. No.	Topic	Page No.
1	Olympiads – Gateway to Global Recognition	1
2	India and the Olympiads	3
3	Mathematical Olympiad Program in India	4
4	Science and Astronomy Olympiad Programs in India	10
5	Some Popular Olympiads in India Conducting by Other Organisations	19
6	National Talent Search Examination (NTSE)	22
7	Mukhyamantri Vigyan Pratibha Pariksha	28
8	Kishore Vaigyanik Protsahan Yojana (KVPY)	29
9	Engineering – A Career Full of Opportunities	32
10	Medical – A Career Endowed with Respect	38
11	Frequently Asked Questions Related to Medical & Engineering Entrance Exams	43
12	The Aakash Advantage	45
13	Glimpse of Year-long Classroom Courses Offered by Aakash	49
14	Events Calendar (Olympiads / NTSE / KVPY)	50

OLYMPIADS – GATEWAY TO GLOBAL RECOGNITION

Olympiads are a group of annual global competitions held in various areas of science for pre-college students. The best 4-6 students from each country are selected through National Olympiads with the exception of the Olympiads in Linguistics - IOL (two teams per country), Informatics – IOI (two teams from the host country) and the Junior Science Olympiads – IOJS (for junior secondary students). **There are several Olympiads held across the world, few of them are listed below:**

1. The International Mathematical Olympiad (IMO, since 1959; not held in 1980)
2. The International Physics Olympiad (IPhO, since 1967; not held in 1973, 1978, 1980)
3. The International Chemistry Olympiad (IChO, since 1968; not held in 1971)
4. The International Olympiad in Informatics (IOI, since 1989)
5. The International Biology Olympiad (IBO, since 1990)
6. The International Philosophy Olympiad (IPO, since 1993)
7. The International Astronomy Olympiad (IAO, since 1996)
8. The International Geography Olympiad (IGeO, since 1996)
9. The International Junior Science Olympiad (IJSO, since 2004)
10. The International Olympiad on Astronomy and Astrophysics (IOAA, since 2007)

Each Olympiad is a separate exam held by its own organizing body and a common set of rules and regulations. The objective behind conducting the Olympiad exams is that they help in promoting a career in science and serve as a platform to challenge the brightest minds in science across the world. This also serves as an indicator of the standard of science teaching in the country.

Some Other Respectable Mathematical Olympiads

- ❖ **European Girls Mathematical Olympiad (EGMO):** The EGMO, which started in 2012, is a platform which promotes a career in Mathematics amongst girl students by challenging them with the brightest four pre-university girl students from each participating country. The EGMO is a two day event with two written tests held on two consecutive days. Each test consists of three problems and the contest lasts for four and half hours on each day.

India has been participating in the EGMO since 2015 and the selection process for EGMO is conjoined with that for the IMO (The International Mathematical Olympiad)- which will be discussed later in this handbook.

- ❖ **Asia Pacific Mathematics Olympiad (APMO):** The APMO, which started in 1989, is a mathematical competition specifically held for students in Asian countries and the countries in the Pacific-Rim Region Ocean. A student can participate in APMO being in his/her own country.

India has been participating in the APMO since 2015. The APMO is a one day event consisting of 5 problems to be solved in four hours. The other rules and regulations for participating in APMO are similar to IMO.

INDIA AND THE OLYMPIADS

The Homi Bhabha Centre for Science Education (HBCSE) is the nodal centre of the country for Olympiad programmes in mathematics and sciences including astronomy.

The programmes aim at promoting excellence in science and mathematics among pre-university students.

The Olympiad program for Mathematics is a five stage process, before IMO. The Olympiad programmes in Physics, Chemistry, Biology, Astronomy (junior and senior level) and junior science are a four stage process, before the international event, take place for each subject separately.

The Science programme is financially supported by Government of India, in particular, by Board of Research in Nuclear Sciences, Department of Atomic Energy, Department of Science and Technology, Department of Space, Ministry of Human Resource Development, Indian Space Research Organisation.

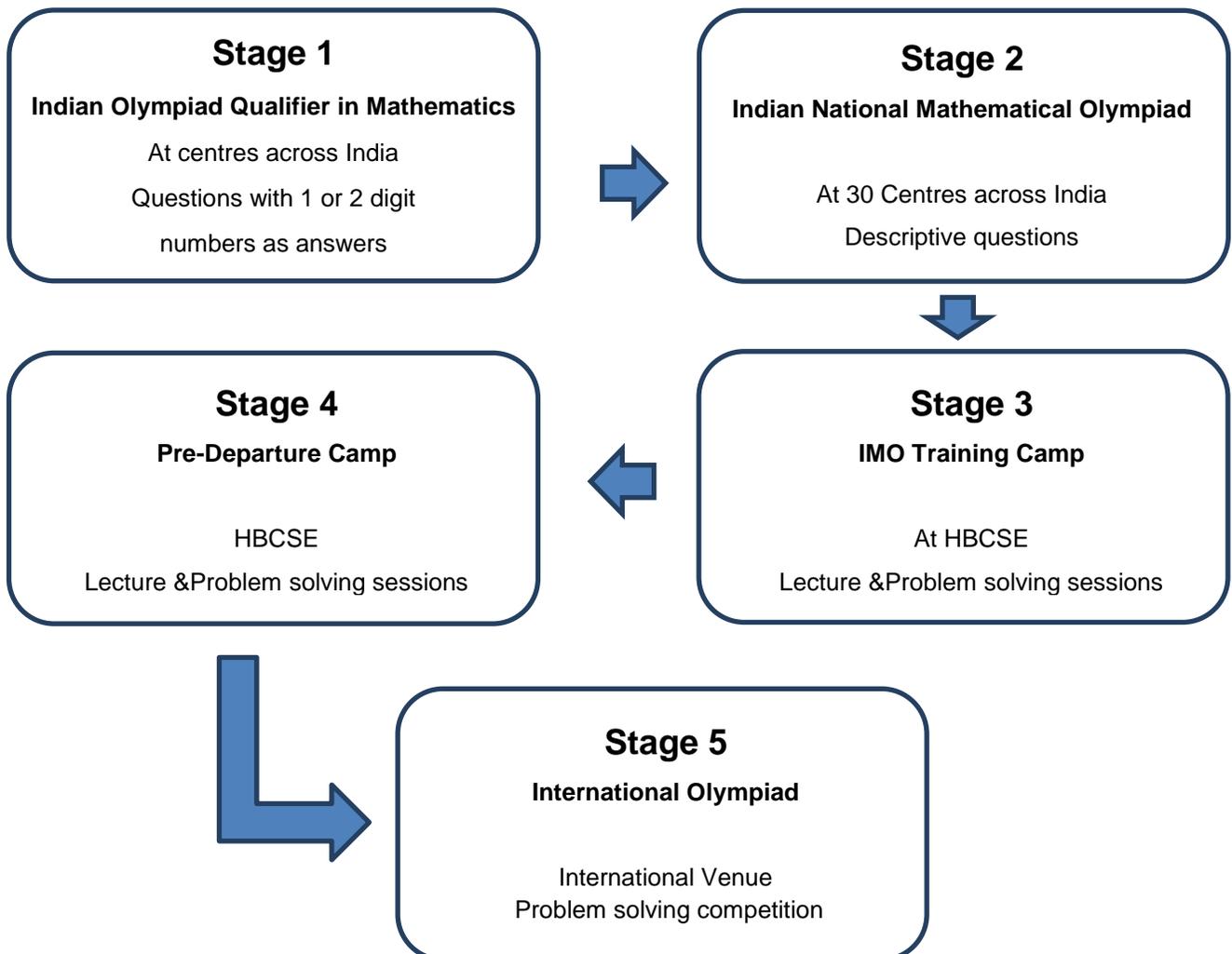
The Mathematical Olympiad is funded by Government of India, through National Board of Higher Mathematics of the Department of Atomic Energy.

Mathematical Olympiad Program in India

The Mathematical Olympiad Programme in India, which leads to participation of Indian students in the International Mathematical Olympiad (IMO) is organized by the Homi Bhabha Centre for Science Education (HBCSE) in collaboration with the National Board for Higher Mathematics (NBHM) of the Department of Atomic Energy (DAE), Government of India. Upto 2019-20 session, there were two separate exams namely PRMO (stage 1) and RMO (stage 2) and from 2020-21 onwards there is a combined exam IOQM. Selected students of IOQM will be eligible to give INMO (stage 2) exam. The first stage (IOQM) of the Olympiad examination is conducted by MTA (Mathematics Teachers' Association) with assistance from IAPT, while the later stages are the responsibility of HBCSE. This programme is one of the major initiatives undertaken by the NBHM. Its main purpose is to spot mathematical talent among pre-university students in the country.

In order to select the students for International Olympiads, the country has been divided into regions with a regional coordinator responsible for each region (details of which are available on the HBCSE website). The Mathematical Olympiad Programme consists of five stages.

The Five Stages



Stage 1: Indian Olympiad Qualifier in Mathematics

- a. IOQM is the first stage for IMO organized by MTA.
- b. Test paper contains 30 questions.
- c. Duration will be 3 hrs.
- d. Eligibility: Not older than 19 years of age as on 1st August and, in addition, studying in Class VIII, IX, X, XI or XII.
- e. Top 300 students from classes VIII, IX, X, XI and 60 students from class XII from each region will get a certificate provided they have scored minimum 10%.
- f. From each region top 30 students from classes VIII, IX, X, XI and top 6 students from class XII + next 5 girls students
- g. Details of examination fees and other details are available on the IAPT Website: <http://iapt.org.in/> or HBCSE Website: olympiads.hbcse.tifr.res.in

Stage 2: Indian National Mathematical Olympiad (INMO)

- a. Tentatively to be held on the last Sunday of February.
- b. Four Hours Written Test consisting of six questions.
- c. Top 30 students from classes VIII, IX, X, XI and top 6 students from class XII are chosen from all over the country in order of merit
- d. In addition to the top 30, up to five girl students will be chosen as INMO awardees under girls' quota based on their performance in INMO.
- e. Eligibility: Students who are selected in IOQM in the previous year and those holding a INMO Certificate of Merit

Stage 3: International Mathematical Olympiad Training Camp (IMOTC)(during April to May)

- a. Month long training camp in April-May at the Homi Bhabha Centre for Science Education (HBCSE), Mumbai for INMO (including 5 awardees in the girls' quota).
- b. INMO Awardees from previous years and the selected girl students of previous years eligible for IMO and EGMO are also invited, provided they have satisfactorily gone through postal tuition throughout the year.
- c. On the basis of a number of selection tests through the Camp, a team of the best six students is selected from the combined pool of junior and senior batch participants.
- d. A team of up to four girl students will be selected for participation in EGMO, based on the performance of girl students from combined pool.

- e. The junior students will receive INMO certificate and a prize in the form of books. The senior students will receive a prize in the form of books and cash.

Stage 4: Pre-departure Training Camp for IMO

- a. Final round of training and orientation for the selected six students for about ten days at HBCSE prior to departure for IMO and EGMO.
- b. A Pre-departure camp will also be arranged for girl students selected for participation in EGMO.

Stage 5: International Mathematical Olympiad (IMO)

- a. The six members team selected at the end of IMOTC accompanied by a leader, a deputy leader and an observer represents the country at the IMO, held in July each year in a different member country of the IMO.
- b. Two written tests held on two consecutive days
- c. Each test consists of three problems
- d. Duration: Four and Half Hours
- e. Selection of team members for IMO will be subject to their fulfilling criteria such as age limit, medical fitness, parental consent and others as specified by the council
- f. Each selected student needs to have a valid Indian passport meeting the visa regulations of the host country.

Syllabus

Pre-degree college mathematics - arithmetic of integers, geometry, quadratic equations and expressions, trigonometry, co-ordinate geometry, system of linear equations, permutations and combination, factorisation of polynomial, inequalities, elementary combinatorics, probability theory and number theory, finite series and complex numbers and elementary graph theory. The syllabus does not include calculus and statistics. The major areas from which problems are given are algebra, combinatorics, geometry and number theory. The syllabus is in a sense spread over Class XI to Class XII levels, but the problems under each topic involve high level of difficulty and sophistication. The difficulty level increases in each level from IOQM to IMO.

Previous years Question papers available on the HBCSE website can provide a good idea of the types of question one can expect.

INMO Scholarship

The INMO awardees who successfully complete IMO Training Camp and who pursue B.Sc., or other courses as per the guidelines of the Board with mathematics as one of the principal subjects of study, are eligible to receive a scholarship of National Board of Higher Mathematics, which is at present Rs. 4,000 per month through the period of their undergraduate studies (subject to satisfactory progress). Enhance scholarship would be available for pursuing masters studies in Mathematics.

Mathematical Olympiads at a Glance	
Subject	MATHEMATICS
Applicable For Students From Classes	VIII to XII Studying Students
Stage I	Indian Olympiad Qualifier in Mathematics (IOQM)
Organizing Body	Mathematics Teachers' Association (MTA)
Release of Notification & Enrollment	Between 4 th week of September to 3 rd week of November
Exam Date	2 nd /3 rd week of January
Result Declaration	Latest by Mid-February
Age	Should not be older than 19 yrs as on 1st August of the appearing year
Eligibility	VIII to XII Studying Students
Syllabus	Pre-degree college mathematics - Usually of Class XI & XII
Exam Pattern	30 questions - 3 hours (integer type → 00-99)
Selection	<ul style="list-style-type: none"> • Top 540 of IOQM regardless of regional quota • 30 (Class XI or below category) + 6(Class XII category) + 5(girl students) from each region
Rewards	Top 300 (Class XI or below) and top 60 students from (class XII) from each region get a certificate (is score $\geq 10\%$)
Stage II	Indian National Mathematical Olympiad (INMO)
Governing Body	Homi Bhabha Centre for Science Education (HBCSE)
Release of Notification	1 st to 2 nd week of February
Exam Date	Last week of February
Result Declaration	Last week of March
Syllabus	Same as IOQM
Exam Pattern	6 Problems - 4 hours
No. of Examinees	Approx. 1100 (Selected from IOQM)
Selections	30 top students from class VIII, IX, X, XI and top 6 students from class XII and 5 girl students under girls' quota.
Stage III	International Mathematical Olympiad Training Camp (IMOTC)
Governing Body & Venue	Homi Bhabha Centre for Science Education (HBCSE), Mumbai
Scheduled Dates	Tentative
Selections	Best 6 for IMO and Top 4 Girls for EGMO
Stage IV	Pre-Departure Training Camps
Duration	10 Days prior to departure for IMO

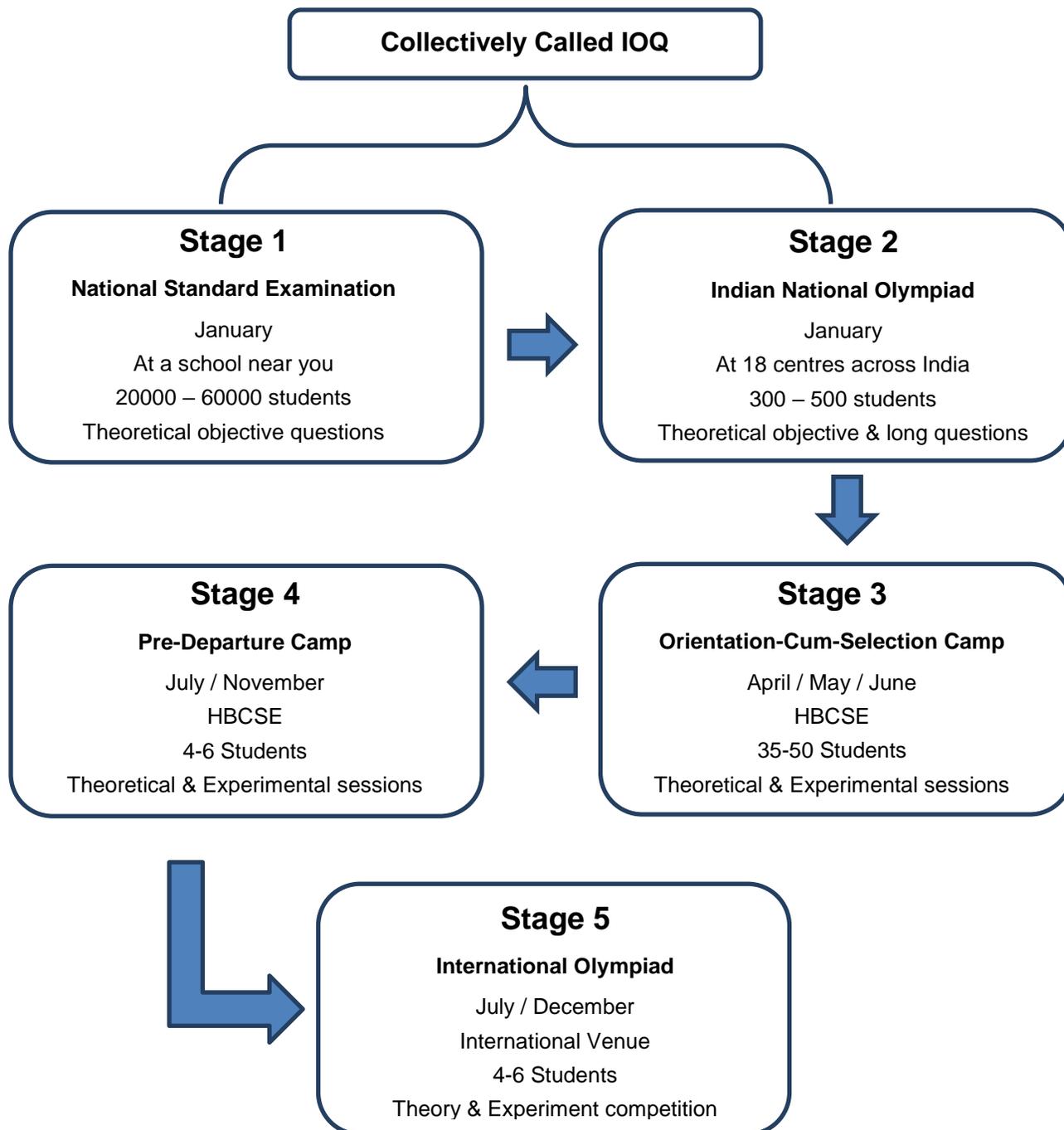
Stage V	International Mathematical Olympiad (IMO)
Exam Date	July
Venue	One member country of the IMO
Team	6 Students with a leader, a deputy leader and observers
Exam Pattern	2 Days (4.5 hours per day to solve 3 sums)
Result Declaration	Winners Receive Gold, Silver, Bronze Medals and Honorable Mentions at the Awards Ceremony after the event

- *Syllabus can be found at HBCSE website*

Science and Astronomy Olympiad Programs in India

HBCSE, which is the nodal agency for the Science Olympiad Program in the country conducts the program in close collaboration with Indian Association of Physics Teachers (IAPT), Association of Chemistry Teachers (ACT), and the Association of Teachers in Biological Sciences (ATBS). The first stage of the Olympiad examinations is conducted by IAPT, while the later stages are the responsibility of HBCSE.

Overview of the Science Olympiads : Five Stages



Stage I: National Standard Examinations (NSE)

Physics: IOQP; Chemistry: IOQC; Biology: IOQB; Astronomy: IOQA; Junior Science: IOQJS

Eligibility:

Programs	Age	Class Studying (In Addition to Age)
IOQA, IOQB, IOQC, IOQP	Not Older than 19 years as on 1 st July of appearing year	Class XII or Lower as on Nov. 30 of appearing year
IOQJS	Not Older than 15 years as on 1 st January of appearing year	Only from Class IX or Class X as on Nov. 30 of appearing year

Syllabus:

Programs	Syllabus
IOQP, IOQC, IOQB	Upto and Including Class XII of CBSE
IOQA	Upto and Including Class XII of CBSE with greater emphasis on Physics, Mathematics and Elementary Astronomy
IOQJS	Upto and Including Class X of CBSE with equal emphasis to Biology, Chemistry, Physics and Mathematics

For all subjects, topics covered in the syllabi of lower classes are included as well

It must be noted that questions and problems in IOQJS, while circumscribed by syllabi given below are usually non-conventional and of high difficulty level, sometimes comparable to International Olympiads.

Exam Details:

75 minutes (Part I)

Exam	Question Paper	Venue	Language
IOQP	Multiple choice questions of the following types: A1. 3-mark questions, each with only one of the four options correct and wrong one gets a penalty of 1 mark. Total 24 questions. A2. 6-mark questions, each with one or more than one option correct. To get credit, all correct option(s) and no incorrect option(s) should be marked. Total 8 questions.	Respective NSE registration centre	Question paper will be in English. (Question paper can be requested in Hindi, Gujarati, Bangla during registration)

Exam	Question Paper	Venue	Language
IOQC	<p>Multiple choice questions of the following types:</p> <p>A1. 3-mark questions, each with only one of the four options correct and wrong one gets a penalty of 1 mark. Total 24 questions.</p> <p>A2. 6-mark questions, each with one or more than one option correct. To get credit, all correct option(s) and no incorrect option(s) should be marked. Total 8 questions.</p>	Respective NSE registration centre	English & Hindi
IOQB	<p>Multiple choice questions of the following types:</p> <p>A1. 3-mark questions, each with only one of the four options correct and wrong one gets a penalty of 1 mark. Total 24 questions.</p> <p>A2. 6-mark questions, each with one or more than one option correct. To get credit, all correct option(s) and no incorrect option(s) should be marked. Total 8 questions.</p>	Respective NSE registration centre	English & Hindi
IOQA	<p>Multiple choice questions of the following types:</p> <p>A1. 3-mark questions, each with only one of the four options correct and wrong one gets a penalty of 1 mark. Total 24 questions.</p> <p>A2. 6-mark questions, each with one or more than one option correct. To get credit, all correct option(s) and no incorrect option(s) should be marked. Total 8 questions.</p>	Respective NSE registration centre	English & Hindi
IOQJS	<p>Multiple choice questions of the following types:</p> <p>A1. 3-mark questions, each with only one of the four options correct and wrong one gets a penalty of 1 mark. Total 24 questions.</p> <p>A2. 6-mark questions, each with one or more than one option correct. To get credit, all correct option(s) and no incorrect option(s) should be marked. Total 8 questions.</p>	Only in KV nearest to your NSE centre	English & Hindi

Enrollment Process:

1. Registration usually starts in the month of September-October.
2. Check with Principal or Head of Department/Institution whether your school/college is a registered centre. If, yes, all formalities can be completed in house.
3. If one's school/college isn't a Registered IOQ Centre, a student has to approach a nearby Registered IOQ Centre for enrollment. The IAPT (Indian Association of Physics Teachers) website will provide all the relevant information pertaining to locating a Registered IOQ Centre and the enrollment process.
4. Details of Examination fees and other details are available on the IAPT Website: <http://iapt.org.in/> or HBCSE Website : olympiads.hbcse.tifr.res.in/

Stage II: Indian National Olympiad (INO)*(held in late January)*

120 minutes

- Organized by Homi Bhabha Centre for Science Education (HBCSE) - the nodal centre for olympiad programmes in the country.
- Organized in the Subjects of Astronomy, Biology, Chemistry, Physics (INAO, INBO, INChO, INPO), Junior Science (INJSO).
- Held at about 18 centres in the country.
- List of selected students as per criteria given below is published in mid January following the year of appearance in NSE.
- National Olympiads for different subjects are held on separate days/times to assist students appearing in multiple exams.
- All INO examinees are eligible for Travel and Dearness Allowance (TA/DA) as per the norms of the programme.

Eligibility: In order to appear in the Part II exam a student has to satisfy all the following clauses pertaining to Stage I:

- a. **Minimum Admissible Score (MAS) Clause** : A candidate should have scored at least 50% of the average of the top ten scores in a subject rounded off to the nearest lower integer.

- b. **Merit Index (MI) Clause** : If a candidate scores 80% of the average of the top ten scores in a subject rounded off to the nearest lower integer he/she will automatically qualify for the Stage II Exam.
- c. **Proportional Representation Clause** : To encourage representation from all States and UT's, quota of representation from each State and UT as per National Talent Search Examination (NTSE) has been used as baseline for selecting students qualifying from registered NSE centres in that State or UT. The target total number of students to be selected in each subject (except astronomy) is 300. If NTSE quota for a state is S and the total number of students appearing in NSE across the country is T, then the total number of students to be selected for INO Stage II Exam from that state would be S/T times 300, rounded off to the nearest higher integer. This number would include those selected on the basis of Merit Index. All selected students must nevertheless satisfy the MAS clause.
- d. **Minimum Representation Clause** : Subject to satisfaction of MAS Clause the number of students selected for INO from each State and UT must be at least five.
- e. **Minimum Total Number Clause** : In event of non-selection of 300 students for a particular subject after application of all the above applicable clauses, additional students may be selected merit-wise, subject to fulfillment of MAS Clause (a) till the target number of 300 is reached. Other clauses will not apply for these students. In case of a tie at the last position, all students with the same marks at this position will qualify to appear for INO Stage II.
- f. **Previous International Representation Clause** : Candidates who have represented India internationally on a previous occasion in the IOAA, IBO, IChO, IPhO need not appear for NSE in that particular subject. Candidates who have represented India in the Asian Physics Olympiad (APhO) and the International Astronomy Olympiad Junior (IAO-Jr) need not appear for the Stage I NSEP and NSEA respectively. A written request in this regard has to be made to the National Coordinator to directly appear for the Stage II INO Exam subject to fulfillment of other eligibility criteria like age, pre-college status etc.

Eligibility criteria for evaluation of part II of IOQA

Student pool of IOQA divided into 2 groups

- Group A : Class XII-250 students
- Group B : Class XI-250 students

Syllabus

- The syllabus for Stage II INO Examination is broadly equivalent to the NSEs in all the respective subjects. However, considering the status of the examination as a National Selection Exam for the International Stage the problems are set to be non-conventional and equivalent to those asked in the International Olympiads.
- The tests consists of objective as well as subjective questions

Stage III: Orientation cum Selection Camps (OCSC)

- Selection based on performance in INOs for a particular subject.
- The number of selections in a particular subject to be announced before the INO Examinations (35 students in Biology, Chemistry, Junior Science and Physics and 50 in Astronomy).
- In the event of a tie at the last position, all the students with the same marks at the last position will be selected for the OCSC.
- Conducted at HBCSE in Mumbai.
- Usually lasts for two to three weeks for each subject.
- Includes several theoretical, experimental and observational tasks.
- Selection of best students on the basis of merit and awarded prizes comprising of cash and books based on performance in theory and experiments.
- 4-6 Selections per subject are made for International Olympiads.

Important Policy Regarding Participation in Olympiad Training Camps

In a given year, a student can participate in the orientation/training/selection camp of one subject including the IMOTC and OCSC for the five science subjects. A student who qualifies to appear in more than one subject in INMO/INO will be asked to arrange the subjects in order of preference of attending the IMOTC/OCSC.

Note : To download Brochure of National Olympiad programme visit website olympiads.hbcse.tifr.res.in

- **Schedule of OCSC:**
 - OCSC Dates are announced by and on HBCSE on their website (olympiads.hbcse.tifr.res.in) in January.

- Dates are chosen keeping National Level Competitive Exams (IIT-JEE or NEET) in mind.
- All eligible candidates are advised to select Mumbai as their examination centre for any competitive exam that are scheduled during the OCSC period.
- Selection for the National Team for the International Olympiads is subject to fulfillment of criteria such as age limits, pre-university status, medical fitness, parental/guardian consent.
- Each candidate must hold a valid Indian Passport as per the visa regulations of the host country before the commencement of the OCSC.

Stage IV: Training of Indian Teams for International Olympiads at HBCSE

- Selected teams undergo a rigorous training program at HBCSE in theory and experiments usually for one/two weeks or longer depending on the subject where special laboratories are set up at HBCSE for Astronomy and Observational Astronomy.
- Experts and Resource Persons from different fields are invited to the training camps.

Stage V: Participation in International Olympiad (IO)

The selected students for each subject are teamed together with 2-3 Teacher Leaders to accompany them for the International Olympiads which are held in a new participating country every year either in the month of July/September/December each year.

Science & Astronomy Olympiads at a Glance					
SUBJECT	PHYSICS	CHEMISTRY	BIOLOGY	ASTRONOMY	JUNIOR SCIENCE
Applicable For Students From Classes	XII appearing or lower Must not have completed (or scheduled to complete) class 12 board examination earlier than 30 November of the year appearing for the NSEs (e.g 2019 this time)				Std. X and Lower
Part I	National Standard Examination in Physics (IOQP)	National Standard Examination in Chemistry (IOQC)	National Standard Examination in Biology (IOQB)	National Standard Examination in Astronomy (IOQA)	National Standard Examination in Junior Sciences (IOQJS)
Organizing Body	(Indian Association of Physics Teachers (IAPT))				
Release of Notification &	Notification is usually released in the months of Sept / Nov with last date of enrolment in 2nd Week of September-October				

Enrolment					
Exam Date	3rd Sunday of Jan 22	4th Sunday of Jan 22	3rd Sunday of Jan 22	4th Sunday of Jan 22	2nd Sunday of Jan 22
Result Declaration	1 st week of March				
Age	Should not be younger than 14 yrs as on 30th June and not older than 19 yrs as on 1st July (both dates inclusive) of the appearing year				Should not be younger than 13 yrs as on 31st December and not older than 14 yrs as on 1st January (both dates inclusive) of the appearing year
Class	Should be studying in Class XII or lower in the appearing year and must not be appearing in NSEJS				Should be studying in class X or lower in the appearing year and must not be appearing in NSEA/NSEB/NSEC/NSEP
Syllabus	CBSE Standard XI/XII				CBSE Standard X
Types of Questions	(IOQP only) Part I : 24 MCQ; Single Option Correct; (+3/-1) Part II : 8 MCQ; Multi Option Correct; (+6 if all options correctly marked, no negative marks)		For IOQJS Part I : 24 MCQ; Single Option Correct; (+3/-1) Part II : 8 MCQ; Multi Option Correct; (+6 if all options correctly marked, no negative marks)		
No. of Examinees	Approximately 30000-40000 students across the country				Approx. 60,000
Selections	Approx. 300 – 400				
Part II	IOQP	IOQC	IOQB	IOQA	IOQJS
	Indian National Physics Olympiad (INPhO)	Indian National Chemistry Olympiad (INChO)	Indian National Biology Olympiad (INBO)	Indian National Astronomy Olympiad (INAO)	Indian National Junior Science Olympiad (INJSO)
Governing Body	Homi Bhabha Centre for Science Education (HBCSE)				
Release of Notification	Sept-Oct				
Exam Date	(January)				
Result Declaration	1st. Week of March				
Syllabus	CBSE Standard XI/XII				CBSE Standard X
Types of Questions	Objective and/or Subjective Problems				
No. of Examinees	Approx. 300 – 400				
Selections	35 (Approx.)	35 (Approx.)	35 (Approx.)	50 (Approx.)	35 (Approx.)
Stage III	Orientation-Cum-Selection Camps (OCSCs)				
Governing Body & Venue	Homi Bhabha Centre for Science Education (HBCSE), MUMBAI				
Release of Notification	Dates to be announced on HBCSE Website by Mid-January				
Scheduled Dates	April – June				
Stage IV	Team Selection & Training of Indian Teams for International Olympiads at HBCSE				
Duration	One - Two Weeks				
Content	Experts from various fields are invited to conduct a rigorous training program at HBCSE in theory and experiments and finally select the best of the lot to participate in the International Olympiads				

Selections	5 Students	4 Students	4 Students	5 Students	6 Students
Stage V	International Physics Olympiad (IPhO)	International Chemistry Olympiad (IChO)	International Biology Olympiad (IBO)	International Olympiad on Astronomy and Astrophysics (IOAA)	International Junior Science Olympiad (IJSO)
Exam Date	July			August	December
Team	5 Students 2 Teacher Leaders	4 Students 2 Teacher Leaders	4 Students 2 Teacher Leaders	5 Students 2 Teacher Leaders	6 Students 3 Teacher Leaders
Exam Pattern	2 Days one for theoretical and another for practical			<ol style="list-style-type: none"> 1. Theoretical Exam 2. Data Analysis Exam 3. Observational Exam 4. Team Competition 	Three Exams on Three Days: <ol style="list-style-type: none"> 1. Test examination 2. Theoretical examination 3. Experimental examination
Result Declaration	Winners Receive Gold, Silver, Bronze Medals and Honorable Mentions at the Awards Ceremony after the event				

Some Popular Olympiads in India Conducting by Other Organisations

	NSO	IMO	IEO	iOS	iOM	NSTSE
Organizing Body	Science Olympiad Foundation (SOF)			SILVERZONE ENTERPRISES INDIA PVT. LTD.		UNIFIED COUNCIL
Subject	Level-1:- Science and Logical Reasoning Level-2:- Science	Level-1:- Mathematics and Logical Reasoning Level-2:- Mathematics	Level-1 and 2:- English	Level-1, 2 and 3:- Science, Reasoning and Aptitude	Level-1,2 and 3:- Mathematics Reasoning and Aptitude	Mathematics and Science.
Applicable For Students From Classes	Level -1:- 1 to12 studying students Level -2:- 3 to 12 studying students			Level-1, 2 and 3:- 1 to12 studying students		2 to 12 studying students
Release of Notification & Enrollment	Level -1:- September - October Level -2:- January		Level -1:- September Level -2:- January	July – August		June
Exam Date	Level -1:- Will be conducted on three dates of November - December Level -2:- February	Level -1:- Will be conducted on three dates of December - January Level -2:- February	Level -1:- Will be conducted on three dates of October - November Level -2:- February	Offline Mode - November-December. Online Mode - December-January.		January
Result Declaration	within 4 - 8 weeks after the exam.					
Eligibility	Level -1:- Class 1 to 12 studying students Level -2:- Class 3 to 12 (Level 1 qualified)			Level -1:- Class 1 to 12 studying students Level -2:- Top 1000 students from each class who qualify level 1. Level 3: 1st Rank Holders of classes 6th to 12th from 2nd level .		Class 2 to 10 studying Students 11(PCM) and 11(PCB) 12(PCM) and 12(PCB) There is no exam for 11, 12 PCMB group.
Syllabus	Corresponding classes of CBSE, ICSE/ISC and State Board syllabi are followed for setting the test papers.					
Exam Pattern	Level - 1:- Class - 1 to 4 - 35 objective-type questions(60 min) Class - 5 to 12 -50 objective-type	Level - 1:- Class - 1 to 4 - 35 objective-type questions(6	Level - 1:- Class - 1 to 4 - 35 objective-type questions(6	Class 1 & 2 No.of Questions - 25 Classes 3	Class 1 & 2 No.of Questions - 25 Classes 3 to 5	For Class 1 : Mathematics : 15 General Science : 25 For Class 2 : Mathematics : 20 GeneralScience : 30

	<p>questions(60 min) Paper consist three sections:- For Class 1 to Class 10 Section-1: Logical Reasoning Section-2: Science Section-3: Achievers Section For Class 11 and Class 12 Section-1: Physics/Chemistry Section-2: Achievers Section Section-3: Mathematics/Biology Level - 2:- Class - 3 & 4 - 35 objective-type questions(60 min) Class - 5 to 12 -50 objective-type questions(60 min) Paper consist following sections:- For Class 3 to Class 10 Section-1: Science Section-2: Achievers Section For Class 11 and Class 12 Section-1: Physics/Chemistry Section-2: Achievers Section Section-3: Mathematics/Biology</p>	<p>0 min) Class - 5 to 12 -50 objective-type questions(60 min) Paper consist four sections:- For Class 1 to Class 12 Section-1: Logical Reasoning Section-2: Mathematical Reasoning Section-3: Everyday Mathematics Section-4: Achievers Section Level - 2:- Class - 3 & 4 - 35 objective-type questions(60 min) Class - 5 to 12 -50 objective-type questions(60 min) Paper consist following sections:- For Class 3 to Class 12 Section-1: Mathematics Section-2: Achievers Section</p>	<p>0 min) Class - 5 to 12 -50 objective-type questions(60 min) Paper consist four sections:- For Class 1 to Class 12 Section-1: Word & Structure Knowledge Section-2: Reading Section-3: Spoken & Written Expression Section-4: Achievers Section Level - 2:- Class - 3 & 4 - 35 objective-type questions(60 min) Class - 5 to 12 -50 objective-type questions(60 min) Paper consist following sections:- For Class 3 to Class 12 Section-1: Word & Structure Knowledge Section-2: Reading Section-3: Achievers Section</p>	<p>to 5 No.of Questions - 30 Classes 6 to 8 No.of Questions - 35 Classes 9 to 12 No.of Questions - 40 Total Marks: 100 Duration: 40 Minutes (i) Section-1: Science (ii) Section-2: Reasoning and Aptitude (iii)Section-3: Scholar's Zone</p>	<p>No.of Questions - 30 Classes 6 to 8 No.of Questions - 35 Classes 9 to 12 No.of Questions - 40 Total Marks: 100 Duration: For Class 1 & 2 - 40 Minutes For Class 3 to 12 - 50 Minutes (i) Section-1: Mathematics (ii) Section-2: Reasoning and Aptitude (iii)Section-3: Scholar's Zone</p>	<p>For Classes 3 - 5 : Mathematics : 25 General Science : 30 Critical Thinking : 05 For Classes 6 to 10 : Mathematics : 25 Physics : 10 Chemistry : 10 Biology : 10 Critical Thinking : 05 For Classes 11 & 12 (PCM) Mathematics : 25 Physics : 15 Chemistry : 15 Critical Thinking : 05 For Classes 11 & 12 (PCB) Biology : 25 Physics : 15 Chemistry : 15 Critical Thinking : 05</p>
Selections	Top 5% of candidates, class wise, who appear in the 1st level exam.		<p>Level -1:- Top 1000 students from each class. Level -2:- 1st Rank Holders of classes 6th to 12th.</p>	Top 25 students of each class are selected for prizes.		
Rewards	Level :-1 - Top 25 rank holders from each class & each Olympiad exam will be awarded Medals of		Prizes of Level 1 and Level 2 will be awarded	Top rankers are awarded with cash		

	Distinction and Participation Certificate for all. Level :- 2 - International, Zonal & Class topper awards will be provided to 2nd level winners from class 3 to class 12. Scholarship is provided to top rankers at International and zonal level.	together based on the Result of the Level 1 examination and Audio/video/ in-person interviews.	prize and laptop. Digital certificates and Student performance Report is given to every participant.
Web Link	sofworld.org/	silverzone.org/	unifiedcouncil.com/about-nstse.html
Note*	Any change in schedule due to Corona will be shared with schools / uploaded on site.	In the year 2021-22, the iOS may be conducted online during Jan/Feb 2022, if it could not be conducted until December 2021 in schools. Level 3 will not be conducted for year 2021-22.	

NATIONAL TALENT SEARCH EXAMINATION (NTSE)

About: The NTSE is a national level scholarship program to identify and nurture students with high intellect. It is one of the most sought after opportunity for students studying in Class X to gain recognition and display their talent at the national level. The total number of students competing for the coveted scholarship is close to 5,00,000 from which only 2,000 awardees are selected. The NTSE program is the brainchild of NCERT (National Council of Educational Research and Training) and aims to identify and nurture talent in the fields of scientific research in India. The examination is conducted every year for class X students at two levels: Stage-I (State Level) and Stage-II (National Level). However, the students studying abroad are exempted from State Level Stage-I.

Stage-I :(200 questions and 240 minutes)

1. Mental Ability Test (MAT) (100 questions and 120 minutes)

- a. To test the power of reasoning, capability to judge and visualize
- b. Questions from Pattern Recognition, Hidden figures, Coding-decoding, block assembly etc.

2. Scholastic Aptitude Test (SAT) (100 questions and 120 minutes)

- a. Questions of Science (40), Mathematics (20) and Social Science (40)

Points to Note:

- Multiple choice based questions.
- Exam for each stage is conducted in two sessions on one day only.
- Stage – I (State Level) question paper carries no negative marking with 1 marks per correct answer.
- Candidates scoring above the required percentage and standing within the specified number of ranks (state quota) will be eligible to appear in Stage – II National Level Examination.

Stage-II :(200 questions and 240 minutes)

1. Paper I : Mental Ability Test (MAT) (100 questions of 100 marks and duration is 120 minutes)

2. Paper II :Scholastic Aptitude Test (SAT) (100 questions of 100 marks and duration is 120 minutes)

Questions of Science (40), Mathematics (20) and Social Science (40)

Points to Note:

- No negative marking in both the papers.
- Only candidates qualifying in both the papers separately will be considered for merit.
- Selection of the awardee will be made on the basis of total marks, scored in MAT and SAT.
- There will not be any paper on Language Test.

Rewards: Students who qualify second stage are eligible for scholarship. The amount of scholarship is Rs. 1250 per month for Class XI and XII and Rs. 2000 per month for students studying under graduate and above.

Website : www.ncert.nic.in

FAQs on NTSE

SELECTION PROCEDURE

Q1. This scholarship is available for which all classes?

- Only students of Class X can appear for this scholarship exam.
- Students registered under Open and Distance Learning (ODL) are also eligible for scholarship provided the student fulfill certain requirements.

Q2. Does the exam have any eligibility criteria?

Eligibility criteria for Stage-I can vary from state to state. The State/UT may impose any eligibility condition for appearing in Stage-I examination.

Q3. The successful candidates get a scholarship up to what grade?

The awardees studying in Sciences, Social Sciences, Humanities, Languages Commerce, vocational studies and fine arts are eligible to receive scholarship up to Ph.D. level. The awardees studying professional courses in medicines, engineering, technology, management and law, are eligible to receive the scholarship up to second degree level.

STAGE-I EXAM: STATE LEVEL EXAMINATION

Q4. Where can I get the application form for Stage-I?

You need to contact Liaison Officer of your State/UT. Addresses of Liaison Officers are available on the NCERT website i.e. (www.ncert.nic.in)

Q5. Do I have to apply through school only or I can do the registration directly?

You are required to submit your application after getting it duly signed by the Principal of the school before the due date as advertised/circulated by your state /UT.

Q6. In case of any queries regarding Stage-I examination, whom can I approach?

In case of any information /query regarding the details of the Stage-I examination, you may approach the Liaison Officers of your state/UT. NCERT does not entertain Stage-I applications or queries.

Q7. Can the applications be directly sent to NCERT?

No, you are advised to submit your application to your Liaison Officer of State/UT.

Q8. What is the fee for Stage-I examination?

You need to check for fee details as per the state advertisement/ circular. Each State / UT has its own rules with respect to charging of fee.

Q9. Are Stage-I examination marks added to the Stage-II exam conducted by NCERT?

No.

Q10. Does Stage-I exam have negative marking?

No.

STAGE-II EXAM: NATIONAL LEVEL EXAMINATION**Q11. Is any fee charged for appearing in the National Level Examination?**

No fee is charged for appearing in Stage -II examination.

Q12. After clearing Stage-I examination, do I have to fill and submit another form for Stage-II examination?

No separate form has to be submitted for Stage-II examination.

Q13. How will I receive my Roll Number for Stage-II examination?

The NCERT shall upload the E-admit cards for the second level examination on its website.

Q14. What is the syllabus for Stage-II examination?

There is no prescribed syllabus for the Stage-II examination. However, the standard of difficulty shall conform to the secondary level.

Q15. I am from Gujarat. Will I be getting question booklet for SAT and MAT in Gujarati?

Yes, you will be provided with question booklet in Gujarati language. The tests are also available in Asamiya, Bangla, English, Gujarati, Hindi, Kannada, Marathi, Malyalam, Odia, Punjabi, Tamil, Telugu and Urdu.

Q16. If I have shifted to new location after my Stage-I exam, how will I get my roll number?

In case of any change of address prior to the national level exam, it shall be obligatory on the part of the candidate to communicate the same to the state examining authority, which in turn shall inform NCERT.

Q17. Are there centres for Stage-II exam in all the state capitals in the country?

There are 36 centers across the country. Usually, the candidates belonging to a particular state shall be allotted the center in the same state for the Stage-II examination.

Q18. Is there an interview stage after Stage-II exam?

There is no interview in NTSE. Selection is based on the performance of written test in MAT and SAT.

Q19. How do I get information regarding the result of the exam?

Results will be uploaded on NCERT website. Only the selected candidates shall be informed by letters sent through speed post.

Q20. Does Stage-II exam have negative marking?

No.

Q21. Can a candidate apply or request for rechecking?

No. Since the NCERT applies rigorous checks and counterchecks before the declaration of result, no request for re-evaluation or rechecking is entertained.

National Talent Search Examination (NTSE) at a Glance			
Applicable for students from classes	Studying in Class X		
Organizing body	National Council of Educational Research and Training (NCERT) Website : ncert.nic.in		
Release of notification & enrolment	STAGE I(State Level): July-August STAGE II(National Level): Stage I qualified candidates are directly notified by the NCERT		
Eligibility	Any student studying in class X can appear		
Exam Structure & Date	STAGE I : Conducted by States/UTs in the month of November STAGE II : Stage-I qualifying candidates across the country will be allowed to appear for stage-2 conducted by NCERT in May(second Sunday)		
Result Declaration	STAGE I: January- March(by respective States/UTs) STAGE II: August(By NCERT)		
Exam	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">Stage I consists of two papers: a. Mental Ability Test (MAT) b. Scholastic Aptitude Test (SAT)</td> <td style="width: 50%; padding: 5px;">Stage II consists of two papers: a. Mental Ability Test (MAT) b. Scholastic Aptitude Test (SAT)</td> </tr> </table>	Stage I consists of two papers: a. Mental Ability Test (MAT) b. Scholastic Aptitude Test (SAT)	Stage II consists of two papers: a. Mental Ability Test (MAT) b. Scholastic Aptitude Test (SAT)
Stage I consists of two papers: a. Mental Ability Test (MAT) b. Scholastic Aptitude Test (SAT)	Stage II consists of two papers: a. Mental Ability Test (MAT) b. Scholastic Aptitude Test (SAT)		
Syllabus &Types of Questions	<p>STAGE I : (no negative marking) a. Mental Ability Test (MAT) (100 Questions) : Pattern, Deduction Based MCQs to test mental ability/speed(120 minutes) b. Scholastic Aptitude Test (SAT) (100 Questions) : MCQ from Mathematics, Science and Social Science broadly based on the prescribed respective State Board Syllabus from Std 9th to 10thclass(120 minutes)</p> <p>STAGE II :(no negative marking) a. Mental Ability Test (MAT) (100 Questions, 120 minutes) b.Scholastic Aptitude Test(SAT)(100 Questions, 120 minutes) MCQs from Science (40 Questions) Mathematics (20 Questions) and Social Science (40 Questions)</p>		
No. of Examinees	Around 5 lakh students across the country in stage-I		
Selections	Approx. 8400 students (this number is revised after every three years) are selected from stage-I and finally 2000 students are awarded scholarship		
Scholarship Scheme	a. Class XI and XII :Rs. 1250 per month b. Graduates and Postgraduates :Rs. 2000 per month c. Ph.D. candidates : As per UGC norms		
Qualifying Marks	Stage I and Stage II : General & OBC – 40% SC, ST and PwD – 32%		

Mukhyamantri Vigyan Pratibha Pariksha

Previously it was known as Junior Science Talent Search Examination (JSTSE). It is conducted by Science Branch of Directorate of Education, Delhi every year usually in the month of January for the students of recognized schools of Delhi.

Eligibility : Any student of recognized school studying in Class IX in Govt. / Govt. Aided / Public / KV / Navodaya / NDMC and must have secured 65% marks in class VIII (5% relaxation in marks for the students belonging to SC/ST and PH category)

Examination fee : No examination fee is charged from students for appearing in this exam.

Type of Examination : The examination consists of two papers.

Paper	Test	No. of Questions	Marks	Duration (in minutes)
Paper I	Mental Ability Test (MAT)	100	100	120
Paper II	Scholastic Aptitude Test (SAT)	100	100	120

There will be no negative marking

- Qualifying marks for candidates from General, OBC & EWS is 40% in each paper and for other (SC/ST/PH category) is 32% in each paper.
- Scholarship: Total 1000 students will get Rs 5000 per student as scholarship.

Website : <http://www.edudel.nic.in/>

Kishore Vaigyanik Protsahan Yojana (KVPY)

The "Kishore Vaigyanik Protsahan Yojana" (KVPY) is a program started in 1999 by the Department of Science and Technology (DST), Government of India to encourage students to take up research careers in areas of basic sciences, engineering and medicine. The aim of the program is to identify and encourage talented and motivated students to pursue a career in research.

This program aims to assist students to realize their potential and to ensure that the best scientific talent is groomed for research and development in the country. Generous fellowship and contingency grants are provided to the selected KVPY Fellows up to the pre Ph.D. level or 5 years — whichever is earlier. In addition, summer camps for the KVPY Fellows are organized in prestigious research and educational institutions in the country.

The Department of Science and Technology, the nodal agency of the Government has entrusted the overall responsibility for organizing and running the KVPY Program to the Indian Institute of Science, Bangalore and set up a Management Committee and a National Advisory Committee (NAC) for overseeing its implementation. A core committee looks after both the day-to-day and academic aspects of the KVPY Program.

The KVPY fellowship is granted in the following streams:

1. **SA** : Students enrolled in XI Standard in Science Streams having secured minimum 75% marks aggregate in Maths and Science in X Standard Board Exams.
2. **SX** : Students enrolled in XII Standard in Science Streams having secured minimum 75% aggregate in Maths and Science in X Standard Board Exams and are required to score a minimum of 60% in aggregate in Mathematics and Science subjects in XII Standard Board Examination.
3. **SB** : Students enrolled in the 1st year of undergraduate program in Basic Sciences and having secured a minimum of 60% marks in aggregate in Mathematics & Science subjects in the XII Standard Board Examination. In the 1st year final examination of the degree course they must secure 60% marks before taking up the fellowship, if awarded.

SELECTION PROCEDURE

Aptitude Test: After scrutiny of application forms and meeting the eligibility criteria for various streams, all eligible students will be called for a written aptitude test conducted both in Hindi and English at different centers across the country. The details of the venue of the aptitude test for the eligible students and their seat number will be published in the KVPY website (Online mode only).

Interview: Based on the performance in the aptitude test, short-listed students will be asked to appear for an interview which is the final stage of the selection procedure.

The merit list is based on 75% weight-age for Aptitude Test marks and 25% weight-age for the interview marks in all the streams.

FELLOWSHIP : The fellowship awarded as per the current scheme is:

BASIC SCIENCES	Monthly Fellowship	Annual Contingency Grant
SA/SX/SB - during 1st to 3rd years of - B.Sc./B.S./B.Stat./B.Math. / Integrated M.Sc. /M.S.	Rs. 5000	Rs. 20000
SA/SX/SB - during M. Sc. / 4th to 5th years of Integrated M.Sc. /M.S./M.Math./M.Stat.	Rs. 7000	Rs. 28000

Exam Dates :

The advertisement for the KVPY Fellowship appears in all the national dailies normally on the Technology Day (May 11) and the second Sunday of July every year.

Note : For question papers of previous years along with answer key please visit website : www.kvpy.iisc.ernet.in/

FAQs on KVPY

Q1. Can I take a computer based test in Hindi?

Yes.

Q2. What is the syllabus for the aptitude test?

There is no prescribed syllabus for the aptitude test. The aptitude test aims to test the understanding and analytical ability of the student than his/her factual knowledge.

However, students are tested for the syllabus up to class X/XII/1st year of B.Sc./B.S./B.Stat./B.Math./Int. M.Sc./M.S. as applicable.

Q3. Can I avail the KVPY Fellowship along with a merit scholarship?

KVPY does not allow its Fellows to receive simultaneously fellowship /scholarship from more than one_source, either government or private. In case they are in receipt of any other fellowship or scholarship, they will have to relinquish it in order to avail the KVPY Fellowship.

Kishore Vaigyanik Protsahan Yojana (KVPY) at a Glance	
Applicable for Students From Classes	Science students of class XI, XII and graduation first year
Streams	a. SA : Class XI, b. SX : Class XII, c. SB : Graduation First Year
Organizing Body	Indian Institute of Science
Funding Body	Department of Science and Technology, Government of India
Release of Notification & Enrolment	July–August
Exam Date	22 nd May, 2022
Result Declaration (Exam)	1 month after exam date
Interview Date	–
Result Declaration (Interview)	–
Exam Pattern	a. Aptitude Test (75% Weightage in Merit List) – Online mode b. Interview (25% Weightage in Merit List)
Eligibility:	
Class	a. SA : Enrolled in Class XI in the appearing year b. SX : Enrolled in Class XII in the appearing year c. SB : Students enrolled in the 1st year of undergraduate program in Basic Sciences namely Physics/Chemistry/Mathematics & Biology leading to B.Sc./B.S./B.Stat./B.Math./Int. M.Sc./M.S.
Marks	a. SA: Minimum of 75% (65% for SC/ST/PWD) marks in aggregate in MATHEMATICS and SCIENCE subjects in the X Standard Board examination b. SX: Minimum of 75% (65% for SC/ST/PWD) marks in aggregate in MATHEMATICS and SCIENCE subjects in the X Standard Board examination and a minimum of 60% (50% for SC/ST/PWD) marks in aggregate in SCIENCE subjects (Physics/Chemistry/Biology) in the XII standard Board Examination c. SB: Minimum of 60% (50% for SC/ST/PWD) marks in aggregate in SCIENCE subjects (Physics/Chemistry/Biology/Mathematics) in the XII Standard Board Examination. In the 1st year final examination of B.Sc./B.S./B.Math./B.Stat./Int. M.Sc./M.S. they must secure 60% (50% for SC/ST/PWD) marks before taking up the fellowship, if awarded
Syllabus	There is no prescribed syllabus for the Aptitude test. The exam aims to test the understanding and analytical ability of the student than his/her factual knowledge. However, students are tested for the syllabus up to class X/XII/1st year of B.Sc./B.S./B.Stat./B.Math./Int. M.Sc./M.S. as applicable
Types of Questions	a. SA : MCQ - Science and Maths - All Compulsory b. SX & SB : Four sections in Part I (Physics, Chemistry, Biology and Mathematics) and four sections in Part II (Physics, Chemistry, Biology and Mathematics). Candidates are allowed to answer any THREE of the four subjects in Part I and any TWO of the four subjects in Part II
No. of Examinees	1 to 1.5 Lakh Students across the country
Selections	600 - 700 Students (approx.) are awarded fellowships
Fellowships	SA/SX/SB -during 1st to 3rd years of B.Sc./B.S./B.Stat./B.Math./Integrated M.Sc./M.S. : Monthly Fellowship - Rs.5000 ; Annual Contingency Grant - Rs. 20000
	SA/SX/SB - during M. Sc. / 4th to 5th years of Integrated M.Sc./M.S./M.Math./M.Stat. Monthly Fellowship - Rs. 7000 ; Annual Contingency Grant - Rs.28000

Engineering – A Career Full of Opportunities

Reasons to choose Engineering as a Career

A career in engineering has always been one of the most important choice of the dynamic youth of this country. The challenges and the varied explorative opportunities that it offers fascinate the youth beyond any dimension. An Engineer commands respect in society for his/her innovative ideas. A talented and skilled engineer can set-up his own enterprise to achieve financial freedom and also contribute towards the development of society and nation.

To 'engineer' literally means to "make things happen". Engineering is about the design and production of useful products and services. Engineering know-how converts scientific knowledge into technology and then technology into successful innovation. Many seemingly simple aspects of our daily lives have been conceptualised, designed and developed by an engineer.

There are numerous reasons for choosing engineering as a career, listing a few, which are as follows:

Engineers are the architects of society & nation

The skyrocketing buildings, numerous industrial plants, small and large scale industries are the brain child of engineers. These industries provide employment to a chunk of the population thus contributing to nation development and bridging the employment gap.

Engineers have diverse careers opportunities

The history of civilisation is the ready reckoner which proves that engineers have diverse career opportunities. Engineers have contributed to their communities, countries, colleagues and civilisations by making tools, machines and countless other things to help people improve their lives apart from making progress by leaps and bounds. The diversity in engineering offers you an array of opportunities ranging from IT to Biomedical Equipment and Mining, from building roads to space travel.

Engineers are in great demand

Skilled engineers are in great demand across all engineering sectors. Scarcity of skilled technocrats is one of the barriers to business growth and delivery. We need more engineering personnel to build roads, conceptualize climate change projects, modernize our defence force and the list goes on.

Shortage of skilled engineers means job security for the expert ones.

Engineers get to work in innovative jobs

Innovation and creativity is the integral part of Engineering. So, being an engineer means you get to try out new technologies like artificial hearts, developing environmentally sustainable buildings. Engineers design and build virtual reality worlds, soccer fields or new plants. Engineers discover and patent new materials that may allow us to set up colonies on Mars someday or even develop an AI powered assistant which can take care of all our menial jobs during the day. Engineers are involved in making the future a reality.

Engineers have job opportunities everywhere

Engineers work everywhere: in cities, regional and rural communities, even remote wilderness areas. Some engineers work in business offices, classrooms, others in factories or research labs; some work outdoors or even in outer space. Some engineers have undertaken double degrees and go into medicine, law, business management, or in policy making. Trained as an Engineer, you have got numerous career opportunities and bright future prospects.

Qualities Required in an Engineering Aspirant

- Good in Maths and Science
- Enjoys puzzles, have problem- solving aptitude
- Invites academic challenges and is a good time manager
- Is curious and wants to know how things work
- Wants a career that's interesting and varied
- Enjoys working with other creative and smart individuals
- Would like to make a difference in the world
- Having strong IQ and analytical ability
- Good communication and presentation skills
- Ready to learn, unlearn and re-learn

Post Engineering Careers

Engineering is the threshold to enter the technical world. A graduate engineer has host of opportunities for higher studies, in research sector as well as in private sector. If a graduate engineer is unwilling to pursue higher studies in engineering, he/she has a lot of opportunities ahead in other sectors also, and can go forward equally to shape their career.

Some of the post engineering career opportunities are given below.

1. Civil Services – Indian Administrative Service (IAS), Indian Police Service (IPS), Indian Engineering Services (IES)
2. Jobs in Public Sector Units (PSU) offering diversified, challenging and stable career options
3. Research and development
4. Teaching
5. Defence Services
6. Private Sector :
 - IT Sector – Google, Facebook, Microsoft
 - Metals & Mining – Vedanta, Tata Steel
 - Heavy Engineering – L&T, ABB, Alstom

Selection of Right Engineering College

IITs and NITs are well known for their teaching standards and therefore they are the first choice for students, who wish to pursue engineering. However, every student is not capable of qualifying the tough entrance tests that these institutes conduct to admit students. These students find it challenging to choose a good engineering college.

Here are a few tips about how to choose a good engineering college.

Institute

The first thing to verify before applying to a particular college is its accreditation and affiliation. In India, National Assessment and Accreditation Council (NAAC) holds value for engineering colleges, they need to be approved by University Grants Commission (UGC) and affiliated to Directorate of Technical Education (DTE) and All India Council for Technical Education (AICTE).

Faculty

Another important factor you need to verify is the faculty profile of the college. You can visit the college website to check their qualification, experience and information about where they have studied. A faculty member who is active in research will normally have a better understanding of the latest developments in the area and therefore be in a position to explain better. The number of faculty members is also important as the faculty to student ratio is an important aspect affecting the quality of education.

Infrastructure

This is also one of the important factors that students need to check because the environment in the institute also has a huge impact on academic performance. Besides the classrooms, laboratory, library, recreational facilities, canteen etc. can be checked by actually visiting the institute. A fully-residential campus usually provides a better learning environment.

Internships & Placements

Ultimately, every eye is fixed on placements and internships because career opportunities start right from here. Students can check the record of the companies that visit the institute for campus placements. You can talk to the students to find out details about the number of students getting placed in good companies; the packages being offered to them; the institutes or organisations offering internship and the kind of training they are provided over there.

JEE (Joint Entrance Exam) – In & Out

JEE (Main):

- JEE (Main) comprises of two papers. The paper 1 is conducted for admission to Undergraduate Engineering Programs (B.E./B.Tech) at NITs, IITs, other Centrally Funded Technical Institutions (CFTIs), Institutions/Universities funded/recognized by participating State Governments, as well as an eligibility test for JEE (Advanced), which is conducted for admission to IITs.
- The examination for all candidates will be conducted in online (computer based) mode only.
- JEE (Main) 2022 will be conducted in two sessions and a candidate will have an option of date(s) to choose from. Scores of different candidates in two sittings will also be equated using standardization techniques.

Sessions	1 & 2
Month of Exam	Session 1: April Session 2: May
Mode	Computer Based Test (CBT)
Marks	Paper 1 (B.E./B.Tech): 300
Total Number of Questions	90 (Students have to attempt 75)
Pattern	Each subject (P/C/M) will have 30 questions and will consist of two sections – A & B. Section A will consist of 20 Questions and Section B will have 10 Numerical Value Based Questions (NVBQs), out of these 10 Questions, candidates can choose to attempt any 5 Questions.
Type of Questions & Marking Scheme	Multiple Choice Questions (MCQs) For Correct Answer: +4 Marks

	For Incorrect Answer: -1 Mark Numerical Value Based Questions (NVBQs) For Correct Answer: +4 Marks For Incorrect Answer: 0 Mark
Duration	3 Hours

JEE (Advanced):

- Top 2.4 lac students of JEE (Main) are selected to appear in JEE (Advanced) for admission to all IITs and ISM, Dhanbad.

Month of Exam	July
Mode	Computer Based Test (CBT) only
Marks	360 Marks in year 2021
Pattern	JEE (Advanced) consists of 2 papers – Paper 1 & Paper 2 which further constitute a total of 57 questions each. Each paper is divided into three sections: Physics, Chemistry and Mathematics, each having 19 questions. Each Paper carries 180 Marks each.
Type of Questions	Single Option Correct, More Than One Options Correct, Numerical Value Based Qs, Paragraph Qs, Non-negative Integer Qs
Duration	Both Paper 1 & 2 will be of 3 Hours each. Paper 1 will be conducted in the morning shift and Paper 2 will be conducted in the afternoon shift

NOTE: The exam schedule and pattern mentioned above is tentative and subject to change. Please check the concerned websites for the latest information.

Myths & Reality about Engineering Entrance Exams

MYTHS	REALITY
JEE is very difficult and tough to crack	The only reason why you could find any exam tough is that you are under prepared. If you do not study for the exam, you are bound to be worried about the result, and will find it tough to crack. One has to plan and work smart with dedication, utilizing his time and capacity to the fullest possible extent. Once the preparation is done, practice of solving past year papers can be of great help.
Burning midnight oil for few months before JEE will take care of everything. This is a general misconception that majority of students have, especially the ones who were unable to begin preparing for the entrance well before time.	Inadequate sleep can also have negative impact on your retention capacity. Instead it would be better if you prepare a schedule where you get up early in the morning and distribute the time for self-study subject wise.
Coaching is a substitute for hard work. Majority of students and even parents believe that once you have got enrolled yourself in a coaching class, half of your work is done and you can be assured that you will get into IITs.	Even if you have enrolled in the best of coaching classes, all they can provide is quality coaching, study material and mock tests, but reading and understanding the study material, studying regularly with dedication and practicing mock tests is totally under your control. This is what affects your eventual performance at the real entrance.
I am good for nothing if I don't get into IITs. Majority of engineering aspirants believe that IITs is the only institute, which can make their future bright. There have been cases of students reaching the extent of committing suicide because they were unable to get into IITs.	While IITs is definitely one of the best institutions, there are a number of good institutions across the country offering engineering that also have good teachers and a track record placement.

Medical – A Career Endowed with Respect

Reasons to choose Medicine as a Career

DOCTORS, in our society, command incredible respect as they save lives of people who, in turn, regard them next to GOD. Many bright students yearn to become doctors every year, with a dream to command this coveted admiration.

Even in this materialistic age, doctors are respected in all walks of life. We observe in our daily life how they are revered as they bring a smile on the faces of millions by saving their lives. Saving lives gives immense gratification as to serve man is to serve God.

A doctor rejoices every time a patient returns home happily, after being cured of fatal diseases and owe heartfelt gratitude to them eternally. A suffering patient trusts his/her doctor hoping for a new life and when they do recover-they express their gratitude from their heart. This sort of satisfaction cannot be experienced in any other profession.

Choosing a career in medicine with a positive attitude and the intent to serve people will give you immense satisfaction and gratify your soul for saving lives. Those who wish to fulfill their ambition of becoming doctors are most welcome to join the medical fraternity with a resolution to serve the people.

Career Coach

Selection of career is one of the most important decisions in life that has the potential to bring radical changes in one's life. Selection of medicine as a career should be done with due deliberation as most of the students do not know the intricate details of this profession. They need to know the finesse and the pros and cons of this profession.

On being asked about the reason behind pursuing medicine as a career, majority of students assert "Make a difference, impact lives and help people." Although, these are obvious motivating factors behind pursuing medicine as a career, there are several other factors that one needs to be aware of while analyzing one's career choices.

Characteristics of a Rewarding Career:

- Service: Provides you an opportunity to help people
- Knowledge: An ever-expanding need for earning new skills and information
- Action: Allows you to be at the forefront in challenging situations, take decisions and make things happen
- Respect: Your work and contributions are important to individuals and the community
- Security: Enables you to earn a good living and provides a consistent source of income and secure future

- **Mobility:** Your skills, knowledge and expertise are in great demand across the world
- **Flexibility:** Offers you a wide variety of career options

There are several careers that may offer you the opportunity to help people and make a difference. However, the challenge before you is to find the career, which is right for you in all counts. If you are committed to serving people, give them a new life by relieving them from pain, medicine as a career is the best choice for you.

Medicine as a profession requires full commitment because you are supposed to serve patients with patience, communicate effectively and listen to their problems, develop relationships, engage in complex problem-solving and learning throughout your lives. Medicine as a career is utmost challenging but financially secure and personally rewarding that gives you eternal gratification—a rare gem of satisfaction.

Advantages of Being a Doctor

- Job Stability
- Incredible Income
- Social Recognition

Post MBBS Careers

MBBS is the threshold to enter medical world that opens multi-dimensional career options apart from core medicine.

If a MBBS degree holder is not interested to study medicine further, he/she has a lot of opportunities ahead in other sectors too.

Some of the post MBBS career opportunities are given below:

Core Medicine

1. Post Graduation in Medicine (MD/MS), in preferred stream / Specialization
2. Higher studies in US through USMLE or PLAB from UK

Applied Science

1. Medical Informatics
2. Genetic Engineering
3. Medical / Pharmaceutical Research

Management

A MBBS degree holder can pursue MBA in Hospital Management and seek career in :

1. Hospital Management
2. Management Level Jobs in the Pharmaceutical Industry
3. Health / Medical Insurance Sector
4. Public Health : WHO/UNICEF

Civil Service : Indian Administrative Service (IAS), Indian Police Service (IPS), Indian Foreign Service (IFS) etc

Qualities required in a Medical Aspirant

A medical student should display certain qualities different from the majority of students because they will be life-savers. Their accountability falls between life and death. One incidence of casual approach may lead to a patient losing his/her life. So, they should be more calm and composed compared to the majority of students. Some qualities given below are mandatory for medical students to inculcate.

- Emotional stability
- Unquestionable integrity & ethical standards
- Unusually smart and problem solver
- Sense of genuine concern for patients during their illness
- Motivated primarily by idealism, compassion and service for life
- Ability and willingness to learn from others
- Observant and committed to quality & safety
- Good communicator and a patient listener
- Adaptable & ability to collaborate with others

Misconceptions about Being a Medico

To be a Medico is not only the 'most sought after' pursuit but also one of the most challenging one due to a plethora of reasons as enlisted below. We have mentioned the top five of them here. Do you believe in any of these?

MISCONCEPTIONS	REALITY
"Only a genius can be a Medico. It is not for me"	Please be assured that NEET is a test to check your basic knowledge up to class XII and your aptitude to perform under time constraints. Even an average student can come out as a winner with well executed plans and strategic efforts. Most of those making entry into Medical Colleges belong to the so called 'average' population.
"It is about strong Academics. I must have an Extra-ordinary % even to think of it."	This is one of the dominant myths which still prevails despite many Medical Entrance Toppers having average academics. There is only a basic qualifying requirement of 50-60% in PCB. Besides, percentage plays no role in deciding your admission in Medical Schools. Medical schools require hard working students. In essence, they are assessing potential. And entrance tests are also designed on that pattern.
"I must study 12 Hours a day to crack it."	Medical Preparation requires consistent efforts on day to day basis rather than Marathon hours with long gaps in between. It is not the number of hours that matter. It is the approach in those hours of hard work. Even four to five hours of focused study may suffice. So study qualitatively rather than quantitatively.
"I am a State Board Student. NEET is not my Cup of Tea."	This is one of the biggest questions in the mind of State Board Students. NEET is conducted by CBSE which follows NCERT Syllabus. Compare the syllabus of NCERT with State Board, which is almost the same. The main difference is in sequence.
"It is not possible to balance School and Aakash together."	Within a few days of the commencement of the courses, many students have felt that they cannot balance Entrance Preparation with XII Board. It is due to the requirement of extra focus to strategize in the beginning. Once you will make a good plan, it will be very easy for you to make sync between School and Aakash Coaching. Remember, the top rankers generally are those who start early and hence perform well in XII Board exam also.

National Eligibility cum Entrance Test (NEET) – In & Out

Central Board of Secondary Education, Delhi conducts the NEET - UG for admission to MBBS/ BDS courses for the seats under 15% all India quota in Medical Colleges. The features of the exam are as follows:

1. The NEET-UG Entrance Examination consists of one paper containing 200 objective type questions (four options with single correct answer) from Physics, Chemistry & Biology (Botany & Zoology).

Total Number of Questions	200 (20 Optional – 5 from Each Subject)
Marks	720
Subjects	Physics, Chemistry, Botany, Zoology
Pattern	Each subject will have 50 questions and will consist of two sections – A & B. Section A will consist of 35 Questions and Section B will have 15 questions, out of these 15 Questions, candidates can choose to attempt any 10 Questions.
Marking Scheme	For Correct Answer: +4 Marks For Incorrect Answer: -1 Mark
Type of Questions	Multiple Choice Questions (MCQs)
Duration	3 Hours

2. The duration of paper is 3 hours.
3. Aspirants should complete age of 17 years at the time of admission in MBBS/BDS courses on or before 31st December of that year.
4. Candidates under General Category must have passed in the subjects of Physics, Chemistry, Biology and English individually and must have obtained a minimum of 50% taken together. In case of SC/ ST/ SC-PH/ SF-PH the minimum marks required is 40% and 45% for General- PH.

Frequently Asked Questions Related to Medical & Engineering Entrance Exams

Q.1 What is the difference between Board Exams and Entrance Exams?

Particulars	Board Examination	Entrance Exam
Parameter of Assessment	Basic concepts.	Application of basic concepts.
Nature of exam	1. Descriptive where merit is tested on knowledge and understanding of the subject. 2. Examination of absolute	1. Purely elimination test where merit is tested on reflex to a question, intelligence and smartness. 2. Examination of relative performance.
Question-time Parity	Enough time is given to write the answer.	Response time is very short.
Nature of preparation required	A student needs to work hard and practice to consolidate the basics.	With basic concepts, a student is required to practice with ascending difficulty level of questions and make strategy to attempt maximum.

Q2. I am in class X. I seek a career in Medical/Engineering but I am unable to decide which stream to pick. How do I choose the stream?

It totally depends on your likes & dislikes. Medical and Engineering as a profession has very bright career prospects. If you are strong in Biology & at the same time feel attracted towards serving the society as a Doctor, go for a career in Medical. On the other hand, if you are strong in Mathematics & have the fire to succeed with new advancements of technology in your professional career, then go for Engineering. Decide early & start preparing in a very strategic manner .

Q3. How will I manage my Board studies & preparation for Medical/Engineering Entrance at the same time?

Boards preparation is a sub-set of preparation for competitive exams. If you are preparing for competitive exams, your basic concepts have to be thoroughly clear so that you can apply them to various situations. If the basic concepts are clear, Boards are automatically covered. You just need to have a regular practise on the pattern on which Boards Exams are conducted.

Q4. Which books should I follow?

The Board studies help you to learn, consolidate and practice your concepts of subjects whereas preparation for Medical Entrances/JEE requires rigorous study of the same subject while gathering all possible knowledge of the particular topic and application of the same. You just need to feel confident and work hard under a Mentor who will guide you to success.

Q5. How to prepare for these exams?

Step - I Learn the basics of all the subjects.

Step - II Consolidate the basics. Practise them.

Step - III Practise the questions of the subjects.

Step - IV Start practising all types of questions with increasing level of difficulty.

Step - V Prepare a strategy to answer maximum questions within a stipulated time period.

Step - VI Start practising on Mock Papers based on the strategy.

Step - VII Practise and change the strategy if required.

Above all, guidance from experienced Mentors is required to chase your dream.

Q6. How much time is required to put in per day to get a good rank in NEET/JEE ?

It varies from person to person. It solely depends on how much time you require to put in every day for the best preparation for an Entrance Test. Apart from regular school studies, you need to put in some extra hours for the preparation which may vary from 4-6 hours per day depending on your grasping ability and level of concentration.

Q7. I can not concentrate on my studies. How to develop concentration during studies?**Doing one thing at a time.:**

Do one thing at a time with your complete undivided attention in order to develop concentration. If you are thinking about planning studies for your exam - for the next 30 minutes or so, just think of that alone. Do not let your attention wander to other things during this time.

Un-clutter your mind by writing down :

While doing something important often unrelated worries invade your mind that affects your concentration. The best way to get rid of it is to pen it down with date, time and way you want to deal with the problem. Thus you can unclutter your mind and concentrate at the task at hand.

Be task specific :

Before sitting down to study for exams, be clear what chapter you want to study now, how much time do you intend to study etc. Be as specific as possible and move on to some other task only after you complete this.

Break task into smaller parts :

Breaking a task into smaller parts will make it seem less daunting and help you approach it with more positivity. Make a goal of finishing one chapter at a time.

The Aakash Advantage

Infrastructure -Setting a Benchmark in the Industry

Air-Conditioned Campus with All Basic Amenities

- Best rated campus amongst all nationalized coaching institutes within Pan India presence.
- Air-conditioned classrooms and CCTV surveillance with basic amenities like clean toilet and pure drinking water to ensure that students can give full attention to academics without any discomfort.

Library

- Well stocked library at all our centers with sufficient copies of all course and reference books along with regular updation of stocks to ensure latest copies of all the references and course books are available.

Technology Enabled Attendance System

- ID Card with Barcode technology for attendance to save precious classroom study time.

Academic Environment – Nurturing Excellence

Study Material

- Precise, Self-sufficient and updated study material reduces the pressure on students to follow multiple books.
- Content in study material – Blend of facts and concepts to hold the students attention and keep them interested in the subjects.
- Assignments accompanying each chapter enable the students to test themselves and give the finishing touch to their preparation of a particular topic/chapter.
- Additional Questions Banks to cover all types of questions which may potentially come in the competitive exams.

Classroom Teaching

- Faculty Team
 - Faculty team comprising of a healthy blend of experience and youth.
 - Selection of faculty members through one of the most stringent selection procedures followed in the industry today.
 - The selection process begins with a Test, after clearing test selected candidates are required to appear for a demo lecture before the Head of Department of the concerned subject and other senior faculties of the subject.

- After clearing the demo stage, the selected candidates are inducted in the system.
 - If the inducted faculties are trainees, they undergo a series of tests and demo lectures to assess the class readiness.
 - Final Induction of the trainees happens after the trainees perform satisfactorily in the training period.
 - This ensures that the faculty team is richly endowed with professionals who score high on both subject knowledge and experience.
- Classroom size is optimally planned for which there are not more than 50-70 students in each class so that faculty member can focus on each student.
 - Systematic, time bound classroom teaching system with topic-wise teaching hours allotted and progress of students strictly monitored by Academic Heads.
 - Sessions are systematically structured which allow students who are in schools and also repeaters to plan their study with enough time for Board Preparation and Self-Study.

Doubt Clearing Facilities

- Adequate number of faculty members in the system to ensure availability of faculty members from all the streams for doubt clearing at any given time.
- Doubt clearing sessions are always one to one and can be fixed by the students either directly with the faculties or through the front desk/Academic Co-ordinator.

iTutor Lab

- In a one of its kind initiative in the industry we have facilitated the setting up of iTutor Labs in all our campuses.
- The labs are equipped with work-stations loaded with pre recorded video lectures on all topics covered at Aakash.
- This facility enables students to make up for loss of classes due to unavoidable circumstances.

Tests (Unit, Term and All India Aakash Test Series (AIATS))

- Utmost priority to assessment empowers the students to check their weak areas and work on them accordingly and serves as a tool to benchmark themselves against the competition.
- **Unit Tests:**
 - Held for a one and a half hour duration after completion of every chapter/s.
 - Ensure that students are always kept on their toes.
 - Assessment tool for chapter/topic wise preparation.

- **Term Test:**
 - Held for three hour duration after every 3-4 Unit Tests.
 - Level of Questions are similar to the main exams.

- **All India Aakash Test Series (AIATS):**
 - Serves as a rehearsal for the main exam as thousands of candidates appear in the exam in every stream for which the exam is held.
 - Informs the students about their level of preparation against the real competition they will face in the main exam.
 - The tests are structured in a way so as to cover all the national level competitive exams and also to the state level exam for the respective state.

Feedback System

- Students feedback - an integral part of the system in Aakash.
- Feedback is taken regularly to ensure that quality of teaching is maintained in Classrooms.
- Feedback is taken on OMR sheets without the student being required to disclose his/ her identity.
- Feedback evaluation through scanner and based on the students inputs, faculty members are advised accordingly, thus helping them strengthen their delivery.

Award System

- Initiated to reward the top performers in AIATS.
- Serves as a motivational tool for performers to carry on their efforts and for others to match up to them.

Special Motivational Sessions

- Aakash Institute invites the best speakers in the country to motivate the students and give them better insights about life in general. Some of them are:
 - Mr. Simerjeet Singh - International Motivational Speaker Youth Motivational Coach who specializes in supporting the success journey of students and organizations inter-nationally.
 - Mr. Rajesh Fernando – Guinness World Record holder in Communicating Values through the art of illusions. His shows leaves an everlasting impact on the lives of the students at Aakash.
 - Mr. Rajiv Thakkar – Nationally acclaimed Corporate trainer & Management Guru who has shaped the lives of many students and parents in their career.

- Annual Award Ceremony
 - Star studded Annual Award Ceremony for the successful candidates to recognize their efforts and bring them face to face with the current batch of students. We have invited some renowned persons to motivate the students.

Communication System – Unparalleled

One of the most transparent systems in the industry with multiple channels of communication to ensure that parents and students are informed well in advance of all related matters.

- Automated attendance system informs parents through SMS about absenteeism of their wards.
- Schedule of tests and modification in class timings or scheduling of extra classes are routinely communicated to the students and parents accordingly.
- Performance of the student in every test and exam is communicated to their parents through SMS so as to keep them in the loop about their ward's preparation for the competitive exam.
- Important notifications about all competitive exams are given utmost priority and information about them is passed on to the parents and students as soon as they are declared officially.
- Parent Teacher Meetings are organized so as to provide a platform for parents to share their thoughts and discuss all matters concerned with the career development of their ward.
- Apart from the official Parent Teachers Meetings our system enables parents to inquire about their wards performance and discuss with the faculty members anytime and whenever they want during the academic year.
- In case the students who are in the campus want to leave early for some urgency, they are permitted to do so with prior approval of the front desk only. Parents are normally called to verify the genuineness of the student's urgency back home.

Corporate Social Responsibility

- Through a phenomenal initiative – Aakash National Talent Hunt Exam (ANTHE) we seek to provide an opportunity to talented students across the country from any strata of society to prove their talent and avail 100 per cent scholarship for preparation at Aakash.

Glimpses of Year-long Classroom Courses Offered by Aakash

Course Name	For	Admission Criteria		Month of Admission
		Direct Admission	Syllabus & Pattern of Admission Test	
Integrated Classroom Course for Olympiads & Class IX	Class IX Studying students	Above 70% marks in aggregate/ B1 grade & above in Science & Maths in class VIII	Based on Class VIII syllabus of Science & Maths.	November - April
Integrated Classroom Course for Olympiads, NTSE(X)	Class X Studying students	Above 70% marks in aggregate/ B1 grade & above in Science & Maths in class IX	Based on Class IX syllabus of Science & Maths.	November – April
Two Years Integrated Course for NEET	Class XI Studying students	Min. B1 + B1 in Science & Maths/ 70% aggregate marks in Science & Maths in IX/ X	Based on Class IX syllabus of Science & Maths.	For Early batch- January - April For Late batch- May – July
Two Years Integrated Course for JEE (Main & Advanced)	Class XI Studying students	Min. B1 + B1 in Science & Maths/ 70% aggregate marks in Science & Maths in IX/ X	Based on Class IX syllabus of Science & Maths.	For Early batch- January - April For Late batch- May – July
One Year Integrated Course for NEET	Class XII Studying students	Min. B1 + B1 in Science & Maths/ 70% aggregate marks in Science & Maths in X	Based on Class XI syllabus of PCB	November – April
One Year Integrated Course for JEE (Main & Advanced)	Class XII Studying students	Min. B1 + B1 in Science & Maths/ 70% aggregate marks in Science & Maths in X	Based on Class XI syllabus of PCM	November – April
Regular Course for NEET	XII passed Students	70% aggregate marks in PCB in XII/ 70% aggregate marks in Science & Maths in X	Based on Class XII syllabus of PCB.	April – July
Power Step Course for JEE (Main & Advanced)	XII passed Students	70% aggregate marks in PCM in XII/ 70% aggregate marks in Science & Maths in X	Based on Class XII syllabus of PCM.	April – July

EVENTS CALENDAR (OLYMPIAD / NTSE / KVPY)

Month	Mathematical Olympiad		Science & Astronomy Olympiads		NTSE		KVPY	
	Sequence	Event	Sequence	Event	Sequence	Event	Sequence	Event
April	8	International Mathematical Olympiad Training Camp (IMOTC) for IMO	5	Orientation-Cum- Selection Camps (OCSCs) Start for International Olympiads	-	-	-	-
May	1	Notification starts for Stage I: IOQM / PRMO	-	-	4	NTSE Stage II Exam	1	Notification Released
June	9	Pre-Departure Training Camp for IMO	6	Team Selection & Training of Indian Teams for International Olympiads at HBCSE	5	NTSE Final Results Declaration	-	-
July	10	International Mathematical Olympiad	7	International Physics, Chemistry, Biology Olympiads (IPhO, IChO, IBO)	-	-	-	-
Aug.	2	IOQM / PRMO Exam	1	Notification starts for stage 1: IOQ / NSE	1	Enrolments Start for NTSE Stage I: State Level	-	-
Sept.	3	IOQM result declaration	-	-	-	-	-	-
Oct.	4	RMO Exam	-	-	-	-	-	-
Nov.	-	-	2	Exams: IOQP, IOQC, IOQB, IOQA, IOQJS	2	NTSE Stage I Exam: State Level	2	KVPY Exam
Dec.	5	INMO list from all regions released by HBCSE	8	1. International Olympiad for Astronomy and Astrophysics (IOAA), International Junior Science Olympiad (IJSO)	-	-	3	Result Declaration
Jan.	6	INMO Exam	3	1. International Olympiad for Astronomy and Astrophysics (IOAA), International Junior Science Olympiad (INJSO) 2. Registration for Stage II Stage II Exam Held: INPhO, INChO, INBO, INAO, INJSO	3	NTSE Stage I Result Declaration	4	Interview Starts
Feb.	7	INMO result declaration	-	-	-		-	-
March	-	-	4	Result Declaration: INPhO, INChO, INBO, INAO, INJSO	-		-	5

Disclaimer : The information provided in the booklet may change as per the notification of governing bodies of different exams.

Due to the covid-19 pandemic situation, some of the Olympiads may get postponed. We advice you to check the official website for latest updates on exam dates and complete information